UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III — 6th & Walnut Sts. Philadelphia, Pa. 19106

SUBJECT: Split-Sample Analyses of Groundwater at the Army Creek (Llangollen) Landfill

DATE: April 15, 1977

FROM:

Charles L. Kleeman 3WA30

Technical Assistance Section

ORIGINAL (Red)

TO:

James F. Manwaring, Chief Water Supply Branch 3WA30

On February 22, 1977, I participated in sampling activity of recovery wells, monitoring wells, and a public water supply well near the Llangollen Landfill. Present, besides myself, were James Barron (AFO), another staff person (AFO), and Ronald Staufer (Delaware DNKEC).

The samples were to be split for concurrent analyses by the Annapolis Field Office and EMA Cincinnati. EPA Cincinnati contracted the work to the University of Illinois.

As I remember, the samples for Annapolis were collected in clear glass bottles and those for Cincinnati were collected in amber-brown reagent bottles.

On Wednesday April 13, 1977, I received word from Don Sanning (EPA Cincinnati) that Dr. Chian (Univ. Illinois) reported 1000 ppm background in the samples and that this was probably due to improper cleaning and preparation of the sample bottles by EPA. Dr. Chian was not pleased that organic solvent bottles had been used for the samples. Dr. Chian said that the bottles should have been fired over night in a muffle furnace at 400° F., but that the high background indicated that this had not been done. I asked Don Sanning to put this information in a memo to Al Montague, and he said he would do that.

I also allerted Greg Koltonuk (S&A) regarding this development.

I have not yet received any results from Annapolis. I am very concerned about the apparent sampling and analysis difficulties which have been encountered with these Llangollen samples. I seriously doubt that the results that will eventually come from this split-sample and analysis will be of any significant value due to the problems with background in Cincinnati's half of the split. Assuming that this doubt will become confirmed, EPA will have to act promptly to initiate another sampling program in order to obtain some uscable data on the groundwater quality in the aquifers at the Army Creek (Llangollen) Landfill.

cc: Larry Miller 3SA69 Al Montague 3RD00 Robert Allen 3AH30 Ort Villa

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